

**Columbia River Regional Forum  
Technical Management Team Conference Call  
July 13, 2007**

**1. Welcome and Introductions**

The purpose of today's unscheduled TMT conference call was to revisit Dworshak operations in light of new information that shows temperatures at Anatone gage have turned out to be higher than expected under the current operation of 12 kcfs outflows. The call was chaired by Cathy Hlebechuk and facilitated by Robin Harkless, with representatives from COE, the Nez Perce Tribe, NOAA, Idaho and BPA on the line. The following is a summary (not a verbatim transcript) of the discussion and decisions made on the call. Anyone with questions or comments about these notes should provide them to the TMT chair or bring them to the next meeting.

**2. Dworshak Operations**

Mike Schneider (COE) presented the latest CEQUAL modeling results of forecasted Dworshak flows and temperatures. He walked TMT through a base case scenario, including four different assumptions regarding flows from Hells Canyon Dam, and an alternative scenario:

Base Case Scenario – Continue releasing 12 kcfs outflows through today, then step down to powerhouse capacity for the rest of the month.

Case 1 – Assume that the volume discharged from Hells Canyon in the past week (about 14.6 kcfs) will continue for the coming week.

Case 2 – Assume next week brings a 15% increase in the volume discharged from Hells Canyon last week.

Case 3 – Assume next week brings a 15% decrease in the volume discharged from Hells Canyon last week.

Case 4 – Assume next week's contribution from from Hells Canyon conforms to the STP forecast.

Alternative Scenario – Continue releasing 12 kcfs outflows for 3 more days, then step back on July 16 to powerhouse capacity through July 26. Make up those 3 additional days of flows above powerhouse capacity late in July in order to meet the elevation target of 1535 feet by Sept. 1.

Schneider then described the modeling results for each scenario:

Base Case Scenario - Temperatures at Lower Granite could be expected to stay flat for 3 days, with a mild warming trend running around 20-21 degrees C, depending on flows from Hells Canyon Dam.

Case 1 – Provides 3 days of cooler water which moderates temperatures from July 18-21 and keeps temperatures at or below 20 degrees C as measured at Lower Granite.

Case 2 – Provides the highest temperatures of all conditions modeled, up to 21 degrees C at Lower Granite.

Case 4 – Provides the coolest temperatures of all conditions modeled.

Alternative Scenario – Departs from all other scenarios on July 17 with 3 additional days of 12 kcfs outflows. This alternative shows a more consistent trend, maybe exceeding 20 degrees C slightly, Schneider said, but not until the end of the month. If last year's heat wave in late July were to reoccur this year, temperatures could exceed 23 degrees C.

If the Dworshak water supply is extended as modeled in the alternative scenario, there will probably be opportunities to make up for the water volume spent now by going below powerhouse capacity later this month, Schneider said. Last year, the reservoir elevation went below 1,535 feet, which meant there was less water available in September. Nevertheless, temperatures on the lower Snake did not approach 20 degrees C during that time.

Dave Statler (Nez Perce) asked Schneider whether he was leaning toward any of the modeled interpretations as being the one that most closely reflects reality. The STP simulation for Hells Canyon, with estimated average flows of 11.4 kcfs, might be a bit low, Schneider said. He expressed concern that the degree of cooling anticipated from maintaining 12 kcfs outflows has failed to materialize, given that the full effects of the cooler outflows from Dworshak should have registered at Lower Granite by now. Temperatures on the lower Snake remain close to 20 degrees C.

Paul Wagner (NOAA) asked whether the same 5-day travel time could be expected in terms of rising temperatures that result from a change in operations, or would a temperature increase show up immediately? The same 5 days of travel time from Dworshak to Lower Granite would apply to temperature increases and decreases, Schneider said. So the effects of any operational changes made today at Dworshak can be expected to show up at Lower Granite 5 days from now.

Hlebechuk raised the option of moving gates around to keep outflows from Dworshak in the range of 43 degrees F. Currently, one small unit is operating in undershot mode. Wagner and Haller agreed this change would be a step in the

right direction. The COE will transition the other small unit to undershot mode, with the big unit on overshot mode, and monitor how that affects outflow temperature, Hlebechuk said.

At an FPAC conference call just prior to this TMT call, there was no clear consensus among the Salmon Managers on how to manage Dworshak outflows, Wagner said. He asked whether Mike Schneider's presentation had made any difference in the Salmon Managers' positions.

Russ Kiefer (Idaho) recommended a compromise: continue 12 kcfs outflows and current temperature discharges from Dworshak until Saturday, then drop back to 11 kcfs. Then on Sunday, reduce to full powerhouse (approximately 9.5 kcfs). He thanked the COE for setting up today's consultation on the new modeling results and said that fits his vision of how TMT should function.

Another option FPAC discussed is running at 11 kcfs outflows through the weekend, then dropping to full powerhouse on Monday, Haller said. He expressed concern that late-season water is being tapped this early in the season, a concern Hlebechuk shared because inflow volumes are unknown.

After more conversation, TMT agreed to Russ Kiefer's compromise proposal. The COE will maintain Dworshak outflows at 12 kcfs until Saturday night at 2200 hours, cut back to 11 kcfs outflows at that time, and again to full powerhouse on Sunday night. The, COE will try to maintain Dworshak outflow temperatures in the high 42 to low 43 degree F range.

### ***3. Next TMT Meeting***

The next regularly scheduled TMT meeting will be on Wednesday, July 18. This meeting summary was prepared by consultant and writer Pat Vivian.

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Cathy Hlebechuk	COE
Mike Schneider	COE
Paul Wagner	NOAA
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Russ Kiefer	Idaho
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